QUALITY ASSURANCE/ QUALITY CONTROL REPORT

EE/QA/PR/ 01 /2022-23, DATE: 12-12-2022

Name of Work	:	Improvements to Roads From Mallikarjuna Swamy Temple to Dhobi Ghat. Sl. No. 13 in Mallasandra Park in Ward No 13. Estimation Cost of 1.00 Crore.
Job Code	:	013-18-000095
Bill No.	:	**2nd & Final Bill**
Type of Test Performed	:	Rebound Hammer test As per IS13311-(2)-1992
Materials on which Tests Was Performed	:	1.Cement Concrete Road (M25)
Officers present during inspection	:	1.Sri. K B Narasimha Murthy, AEE – Dasarahalli Project Sub- Div. 2.Sri. Dinesh N, AE – KRIDL. 3.Sri. S. V. Malgavi, AEE - QualityAssurance
Project Management Consultants	:	**M/S NEWZEN CONSULTANTS, BANGALORE.**
Observations	:	Rebound hammer test was conducted at 4 locations in presence of AE (KRIDL), AEE (Dasarahalli Project Sub- Div) & Project Management Consultants. The reading of Rebound Hammer Test for Cement Concrete Road (M25 grade) is recorded by the PMC consultants. The location wise test results furnished by PMC to BBMP QA department are reproduced in the tables shown below:
Test Locations	:	1. Location 1: Ch: 103.00mt, Dhobi Ghat, Dasarahalli Bengaluru. 2. Location 2: Cross Road, "Opp to Sri Ramulu's House" Bengaluru. 3. Location 3: Ch: 80.00mt, Dhobi Ghat, Dasarahalli Bengaluru. 4. Location 4: Ch: 5.00mt, Dhobi Ghat, Dasarahalli Bengaluru.

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಉಪ-ವಿಭಾಗ ದಾಸರಹಳ್ಳಿ
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Table-01: Rebound Hammer Test Results for Location-1

Sl.No.	Location	Rebound Reading	Average Reading	Compressive Strength (N/mm²)	Impact Direction
1	Dhobi Ghat 103.00mt Rd	34	32	32-34	Vertical Down
2		32			Vertical Down
3		33			Vertical Down
4		30			Vertical Down
5		34			Vertical Down
6		30			Vertical Down

Table-02: Rebound Hammer Test Results for Location-2

Sl.No.	Location	Rebound Reading	Average Reading	Compressive Strength (N/mm²) for 28 days	Direction of Hammer Used
1	Dhobi Ghat Cross Road	36	35	37-39	Vertical Down
2		35			Vertical Down
3		35			Vertical Down
4		36			Vertical Down
5		35			Vertical Down
6		34			Vertical Down

Table-03: Rebound Hammer Test Results for Location-3

Sl.No.	Location	Rebound Reading	Average Reading	Compressive Strength (N/mm²) for 28 days	Impact Direction
1	Dhobi Ghat 80mt Rd	33	33.	33-35	Vertical Down
2		33			Vertical Down
3		34			Vertical Down
4		33			Vertical Down
5		34			Vertical Down
6		32			Vertical Down

Table-04: Rebound Hammer Test Results for Location-4

Sl.No.	Location	Rebound Reading	Average Reading	Compressive Strength (N/mm²) for 28 days	Impact Direction
1	Dhobi Ghat 5mt Rd	33	32	32-34	Vertical Down
2		32			Vertical Down
3		32			Vertical Down
4		33			Vertical Down
5		32			Vertical Down
6		32			Vertical Down

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Conclusion:

The file containing **2nd & Final Bill** has been submitted for the above work to QA department on 24-11-2022 requesting for spot inspection. Engineers of QA/QC division have visited the work spot on 02-12-2022.

During the inspection, it was observed that the items provided in estimate have been executed by the contractor. PMC team was instructed to assess the strength of concrete used for Cement Concrete Road (M25 grade) by conducting NDT using rebound hammer test method. The rebound hammer test was conducted by PMC in presence of engineer in charge of work.

From the test results furnished by PMC consultants, it is concluded that the results of the samples collected are in accordance with the standards/ specifications mention in the IRC codes. However, the results submitted by the PMC have been reproduced here with for further needful action. The results checked by QA/QC relates only for item tested in the particular location randomly.

Further, QA/QC directs the PMC and Engineer in-charge of the work that all materials used for the work shall be inspected, tested and accepted as per the relevant specifications before incorporation in the work. The frequencies and methods of sampling and testing materials, including those required for definite purpose and not covered by MORT&H specifications shall be in accordance to the relevant IRC or BIS or AASHTO/ASTM/BS standards in order of priority.

All materials or work not conforming to the requirements of the specifications shall be considered unacceptable and rejected. The unacceptable materials or works that are rejected shall be immediately removed unless the defects are corrected and approved by the engineer in-charge of work.

The concerned Engineer in charge of the work shall follow the direction issued by Chief Commissioner Letter number dated 01.08.2022 and 14.09.2022 and take necessary action as appropriate in accordance with the law.

Note:-

This report by QA/QC is pertaining to the work carried out in 2nd & Final Bill only.

Safety precautions shall be taken at work spot to prevent any mishap, injuries or loss of life to general public and construction workers according to guidelines laid down in code of practices.

Engineer in charge of work shall obtain requisite approval and Implement traffic management plan prior to commencement of work.

Engineer in charge of work shall display details of work, work code, cost of project, start and completion date, and information of Engineer in charge of work with contact numbers at workspot.

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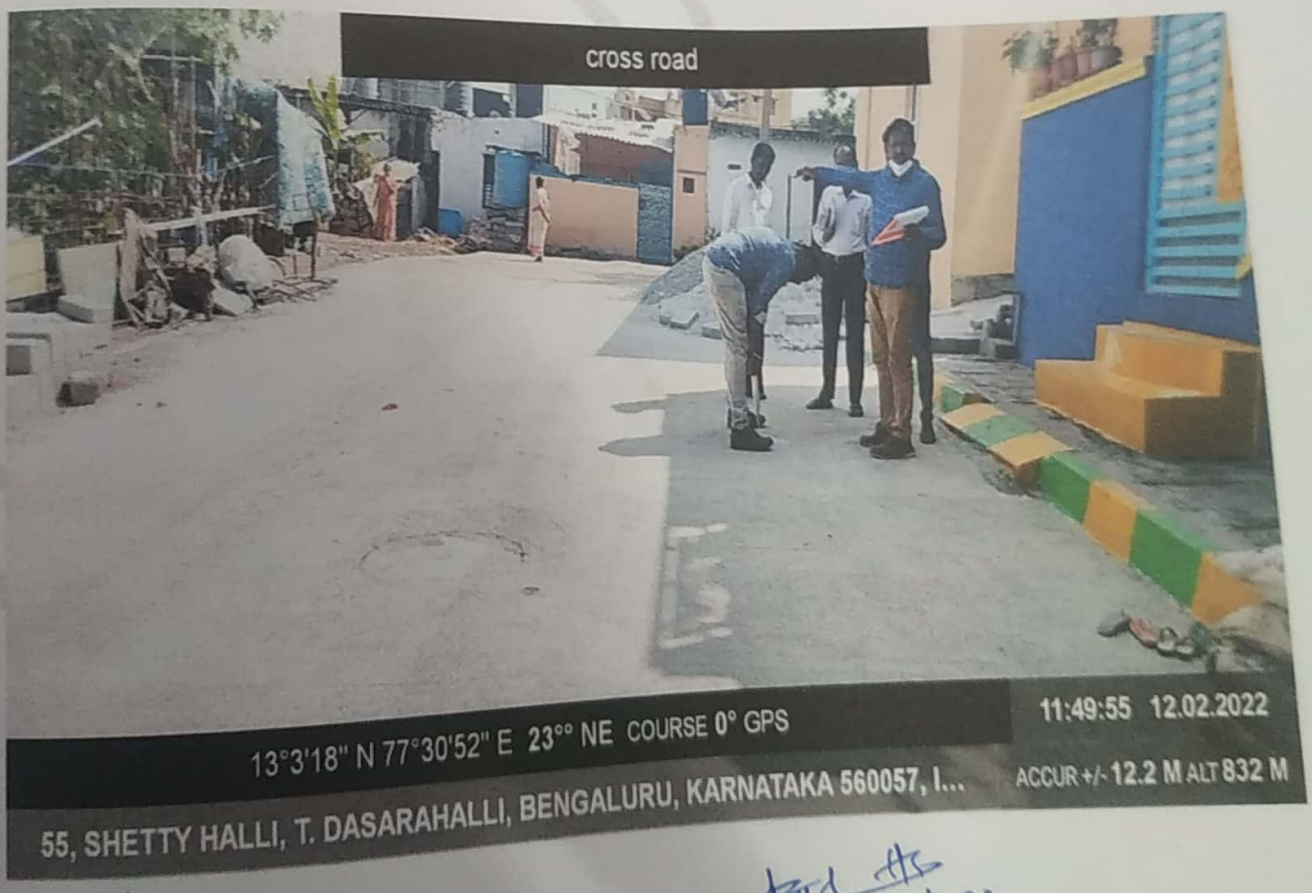
Swamy Temple to Dhobi Ghat, Dasarahalli Bengaluru.



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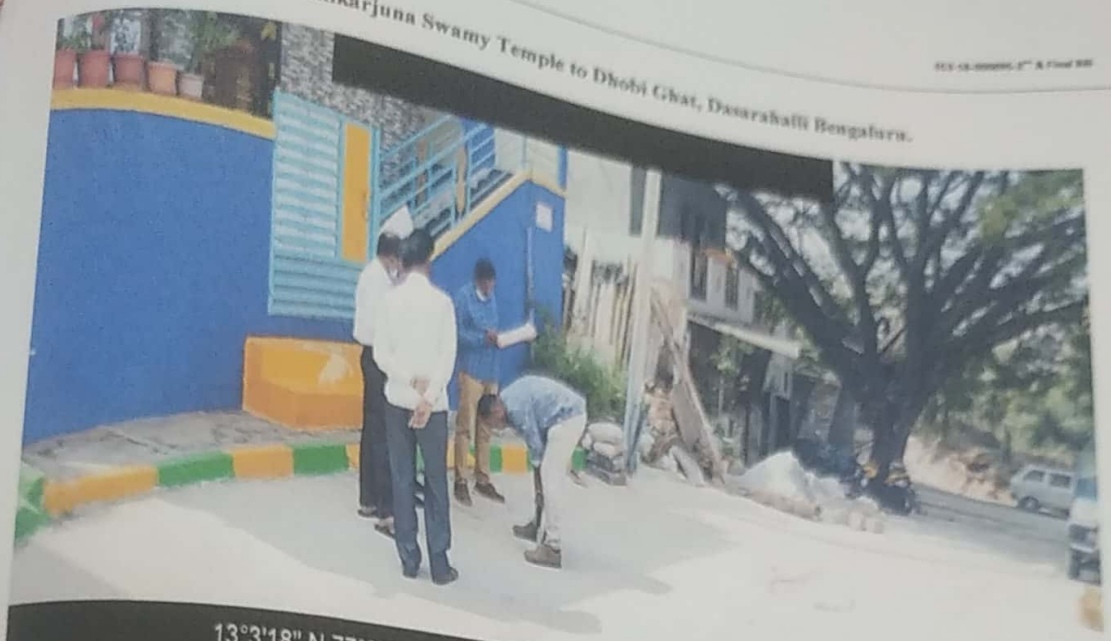
Location 1: Mallikarjuna Swamy Temple to Dhobi Ghat, Dasarahalli Bengaluru.



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